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Dated: July 21, 2005

Signature

*Lawrence E. Russ*  
(Lawrence E. Russ)

Docket No.: EMCORE 3.0-084  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Pophristic et al.

Application No.: 10/780,526

Group Art Unit: 2811

Filed: February 17, 2004

Examiner: Not Yet  
Assigned

For: LOW DOPED LAYER FOR NITRIDE-  
BASED SEMICONDUCTOR DEVICE

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Dear Sir:

It is respectfully requested that the references listed on the enclosed form be made of record and considered with respect to the above-referenced U.S. patent application. A copy of each foreign and non-patent literature reference is enclosed. Also enclosed is a copy of a communication from a foreign patent office in a counterpart foreign application to the above-referenced patent application which first cited the listed references. Submission of the present Information Disclosure Statement should not be taken as an admission that the cited references are legally available prior art or that the same are pertinent or material.

In the event that any fee is due in connection with the present Information Disclosure Statement, the Commissioner is

hereby authorized to charge the same to our Deposit Account No.  
12-1095.

Dated: July 21, 2005

Respectfully submitted,

By Lawrence E. Russ

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**CERTIFICATION PURSUANT TO 37 C.F.R. § 1.97(E)(1)**

Dear Sir:

Pursuant to 37 C.F.R. § 1.97(e) (1), undersigned counsel hereby certifies that each item of information contained in the accompanying Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application to the above-referenced patent application not more than three months prior to the filing of said statement.

Dated: July 21, 2005

Respectfully submitted,

By *Lawrence E. Russ*

Lawrence E. Russ

Registration No.: 35,342

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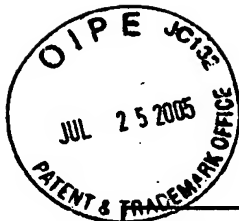
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PTO/SB/08a/b (08-03)

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|---|---|----|---|--------------------------|-------------------|
| <b>Substitute for form 1449A/B/PTO</b><br><br><b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br><br>(Use as many sheets as necessary) |   |    |   | <b>Complete if Known</b> |                   |
|   |   |    |   | Application Number       | 10/780,526        |
|   |   |    |   | Filing Date              | February 17, 2004 |
|   |   |    |   | First Named Inventor     | Milan Pophristic  |
|   |   |    |   | Art Unit                 | 2811              |
|   |   |    |   | Examiner Name            | Not Yet Assigned  |
| Sheet   | 1 | of | 1 | Attorney Docket Number   | EMCORE 3.0-084    |

| U.S. PATENT DOCUMENTS |                          |  |                                |  |   |
|-----------------------|--------------------------|--|--------------------------------|--|---|
| Examiner<br>Initials* | Cite<br>No. <sup>1</sup> | Document Number                          | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|                       |                          | Number-Kind Code <sup>2</sup> (if known) |                                |  |   |
|                       | AA                       | US-2003/141518-A1                        | 07-31-2003                     | Yokogawa et al.                                    |   |
|                       | AB                       | US-5,296,395                             | 03-22-1994                     | Khan et al.  |   |
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| FOREIGN PATENT DOCUMENTS |                          |   |                                   |  |   |                |
|--------------------------|--------------------------|---|-----------------------------------|--|---|----------------|
| Examiner<br>Initials*    | Cite<br>No. <sup>1</sup> | Foreign Patent Document   | Publication<br>Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages or<br>Relevant Figures Appear | T <sup>6</sup> |
|                          |                          | Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known) |                                   |  |   |                |
|                          | BA                       | EP-1 189 287-A  | 03-20-2002                        | Matsushita Electric Industrial<br>Co., Ltd.        |   |                |
|                          | BB                       | WO-03/026021-A  | 03-27-2003                        | Cree Lighting Company                              |   |                |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

| NON PATENT LITERATURE DOCUMENTS |                          |   |                |
|---------------------------------|--------------------------|---|----------------|
| Examiner<br>Initials*           | Cite<br>No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup> |
|                                 | CA                       | "High barrier height GaN Schottky diodes: Pt/GaN and Pd/GaN" APPLIED PHYSICS LETTERS, AMERICAN INSTITUTE OF PHYSICS, New York, US, vol. 68 no. 9, 2-26-96; pp. 1267-1269  |                |
|                                 | CB                       | Lin Yow-Jon et al: "Nitrogen-vacancy-related defects and Fermi level pinning in n-GaN Schottky diodes" 8/1/03, JOURNAL OF APPLIED PHYSICS, AMERICAN INSTITUTE OF PHYSICS, New York, US, pp. 1819-1822.  |                |

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<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.  
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| Examiner<br>Signature |  | Date<br>Considered |  |
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